

# Environmental Movements in Advanced Industrial Democracies: Heterogeneity, Transformation, and Institutionalization

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#### Abstract

Environmental movements are networks of informal interactions that may include individuals, groups, and organizations engaged in collective action motivated by shared identity or concern about environmental issues. This article reviews literature on environmental movements (including antinuclear energy movements) according to four main aspects: the social bases and values underlying the movements' mobilization, the resources supporting their mobilization, the political opportunities channeling their mobilization, and the cultural framing processes through which environmental issues are defined as social and political problems to be addressed through mobilization. In addition, we consider the historical antecedents and roots of environmental movements. Finally, we discuss the interplay between the local and the global levels and the movements' impacts, a long neglected issue in the social movement literature. Our review highlights three main features of environmental movements: they are heterogeneous; they have profoundly transformed themselves; and they have generally become more institutionalized.

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#### 1. INTRODUCTION

Social movements form a constitutive part of contemporary societies. Some have spoken of a social movement society to highlight this feature (1). Social movements can be defined as "a sustained challenge to power holders in the name of a population living under the jurisdiction of those power holders by means of repeated public displays of that population's worthiness, unity, numbers, and commitment" (2, p. 257; italics in original). This qualifies them as a specific form of contentious politics (3). Others have stressed that social movements involve conflictual relations with clearly identified opponents, are linked by dense informal networks, share a distinct collective identity, and engage primarily—but not exclusively—in protest activities (4). In this review, we address scholarly works on environmental movements following these definitions, which are usually shared by scholars focusing on these movements (see Reference 5 for an introduction to environmental movements).

Broadly speaking, and in line with the definitions of social movements given above, an environmental movement "may be defined as a loose, noninstitutionalized network of informal interactions that may include, as well as individuals and groups who have no organizational affiliation, organizations of varying degrees of formality, that are engaged in collective action motivated by shared identity or concern about environmental issues" (5, p. 610; see also Reference 6). As such, it includes a relatively heterogeneous field of actors, actions, organizations, and discourses whose common denominator is the attempt to protect and improve the balance between humans and their natural environment (7). The various actors involved in the movement are sometimes strongly connected, forming what Tilly (8) has called a CATNET (see also Reference 9) while at other times they barely relate to each other. For example, organizations adopting a political ecology approach share deep connections with each other, but only limited ones with more traditional actors focusing on nature protection. At the same time, one should bear in mind that this may vary across countries. There is also great heterogeneity in terms of the issues addressed. These cover a wide range of topics from the early focus on the conservation of nature to protests against transport infrastructures, animal rights, global climate change, and opposition to nuclear energy.

<sup>&</sup>lt;sup>1</sup>CATNET (a combination of CATegory and NETwork) refers to the mobilizing structures upon which a social movement rests. CATegory indicates the extent to which the actors involved in a given movement form a social category distinct from other categories; NETwork refers to the density of ties within that category.

Indeed, scholars sometimes refer to environmental movements in a broad sense, to include antinuclear energy movements. However, scholars sometimes employ a narrower meaning that excludes the latter.<sup>2</sup> Furthermore, some scholars speak of environmental movements, whereas others prefer to call them ecology movements. Although social movements are an analytical category rather than an empirical reality (10), here we examine environmental movements in the broader sense, that is, including antinuclear energy movements.<sup>3</sup>

Environmental movements have a central place in the social movement sector in Europe and North America but also elsewhere. Some have depicted them as the most important movements of the postwar period or even of the twentieth century (11–13). Sociologist Alain Touraine (13) understands these particular movements (and more generally new social movements; see References 14, 15 for reviews) as the main transformative social forces of postindustrial society. One may disagree with this strong claim. However, the point here is that environmental movements have been seen by some eminent scholars as key actors for social and political change.

From the point of view of research, the centrality of the environment in political science and sociology is attested by the existence of scholarly journals entirely devoted to this topic, such as *Environmental Politics* and the new *Environmental Sociology*. There exists a large literature more directly linked to this specific topic that covers a variety of aspects of environmental movements: public opinion, attitudes, and political values that form the potential for the rise and mobilization of the movement; environmental movement organizations and networks; protest and other kinds of activities carried out by the movements; discourses and framings put forward by environmental actors in the public domain. Our review is organized around these four aspects, which are dealt with in four separate sections.<sup>4</sup> In addition, in the next section we consider the historical antecedents and roots of environmental movements. Finally, we discuss the interplay between the local and global levels and the movements' impacts, a long neglected issue in the social movement literature.

Our discussion of the relevant literature allows us to underline two other main features of environmental movements, in addition to heterogeneity and variable network structure: their transformation and, partly related to that, their institutionalization. On the one hand, environmental movements have undergone a profound process of transformation, both in terms of actors involved and issues addressed and in the discourses put forward. On the other hand, perhaps more than any other type of movement, environmental movements have undergone a process of institutionalization that can be seen in the creation of large international environmental organizations and peaks in the emergence of green parties. At the same time, however, this process of institutionalization only applies to certain parts of the movement. Not only actors have become more institutionalized; the issues addressed have as well. Albeit to different degrees, depending on individual characteristics and on the context in which they have been raised and lived in, people today are much more aware of environmental issues than they were, say, 50 years ago and are more environment-friendly than they were in the past, perhaps attesting to an important impact of the movement upon society. Furthermore, governments across the world are also more sensitive to

<sup>&</sup>lt;sup>2</sup>In the literature, these movements are often called more straightforwardly antinuclear movements. Here, however, we prefer to include the word energy to clearly distinguish them from antinuclear weapons movements.

<sup>&</sup>lt;sup>3</sup>The scholarly literature often refers to the environmental movement in the singular. Here we refer to them mostly in plural, in order to stress the plurality of actors that can be subsumed under this term.

<sup>&</sup>lt;sup>4</sup>Although these four aspects reflect the state of the literature on social movements in general, work on specific movements can also be seen in light of other approaches. Thus, Kousis (146) argues that seven theoretical approaches can be distinguished in the study of environmental movements (partly overlapping with the ones we stress here): environmental justice, the treadmill of production, resource mobilization, the political process, state interactions, constructivist/collective identity/reflexive modernization, and networks approaches.

the environment and implement policies aimed at protecting the environment, perhaps at least in part the result of mobilization by environmental movements. We come back to these aspects in Section 8, where we discuss the movements' impacts. The next section speaks directly to the movements' transformation.

#### 2. THE TRANSFORMATION OF ENVIRONMENTAL MOVEMENTS

Environmental movements—narrowly defined, that is, and excluding the antinuclear energy movements—have long-standing historical roots. They can be traced back to the nineteenth century. The American Society for the Prevention of Cruelty to Animals created in 1866 is perhaps the first environmental organization ever, at least at the national level. Others followed, both in Europe and North America, first with a focus on nature conservation and preservation, then on a variety of other issues, including, since World War Two, nuclear energy.

Scholars often distinguish between three streams of the Western environmental movements (5, 16–20): traditional nature conservation, political ecology, and environmentalism.<sup>5</sup> Although we find elements of all three currents in today's movement, each of them corresponds to a specific historical phase.

Nature conservation characterized the movement in its early stages. This stream can be traced back to the second half of the nineteenth century. It was revamped and radicalized with the rise of the new social movements in the 1960s and 1970s. Furthermore, several organizations have transformed themselves, moving from a focus on nature conservation to embracing a broader range of issues relating to environmental protection. In general, however, conservationism has largely maintained its defensive nature, and the organizations and groups that belong to this current often prefer conventional strategies such as lobbying or raising public awareness of environmental problems. As such, this is considered the least movement-like sector of the environmental movements.

New organizations and groups have emerged since the late 1950s that focus on the problematic consequences of uncontrolled economic growth and its related dangers, as described by the influential book Limits to Growth (21) commissioned by the Club of Rome, a nonpartisan think tank founded in 1968 (see also Reference 22). Strongly influenced by the catastrophism literature on the environment (21–27), these organizations and groups contribute to the transition from conservationism to political ecology. Organizations originating in the broader mobilization by the new social movements in the 1960s and 1970s marked the real politicization of the movement. In California, environmentalists won control of 20 of the 58 counties from 1971 to 1973. In West Germany in 1983, during a period of industrial militancy, the Green Party won 7% of the vote, whereas the SPD's share fell by 5%. These events suggested a link between the demise of old leftright cleavage politics and the rise of new issues such as environmentalism within the mainstream political landscape. In the United States as well as in many European countries, environmentalism as lifestyle politics emerged out of New Left, often middle-class anticapitalist segments and particularly, counter-cultural movements. Environmentalism, support for animal rights, veganism, and organic/wholefood diets were all reflections of this new lifestyle. This current goes beyond specific environmental issues to convey a holistic view of a decentralized, democratic, and egalitarian society that develops in harmony with nature (19). In this way, environmental protection becomes intimately linked to a more comprehensive view of social change. The latter includes the

<sup>&</sup>lt;sup>5</sup>Rootes (5) aptly summarizes the history of environmentalism (as represented in the literature) as a succession of conservationism, environmentalism, and ecologism.

"small-is-beautiful" idea (28), as well as a critical proto-Marxist view of the relationship between humans and their environment (29, 30). Deep ecology (31) can also be seen as emanating from this stream. Political ecology is different from nature conservation as well, insofar as it takes unconventional and direct actions and involves mass demonstrations, all part and parcel of the action repertoire of the new social movements. In this context, there has been a rise recently in climate activism on issues such as prorenewable energy and low-carbon technology.

One of the most important transformations undergone by environmental movements so far is the rise of the antinuclear energy movement.<sup>6</sup> Sometimes treated separately as a single-issue movement, sometimes considered as part of the environmental movement (as here), the antinuclear energy movement displays the most typical characteristics of political ecology. In particular, it is highly politicized, as compared, for example, with the conservation stream, but also to parts of the environmentalist stream. As we discuss in more detail below, the antinuclear energy movement strongly mobilized in the 1970s and 1980s, due to—and also contributing to—the crucial significance of the nuclear conflict in Europe and North America. Stressing both the risks relating to potential nuclear accidents—such as those at Three Miles Island (1979), Chernobyl (1986), and more recently Fukushima (2011)—and to nuclear waste disposal, the antinuclear movement has represented and still represents one of the most critical voices with respect to the relationship between humans and their environment.

Environmentalism is the third main movement stream often mentioned in the literature. It refers to a pragmatic approach that stresses the preservation and improvement of the human environment in a broadly defined sense and focuses on such issues as the exploitation of natural resources; land, water, and air pollution; and food quality (19). Unlike the nature conservation stream, environmentalism considers the political arena as the central venue for the articulation of conflicts. Unlike political ecology, its campaigns are more concrete, address specific issues, and, depending on the goal, combine conventional and unconventional forms of action.

In addition to these three streams usually stressed in the literature, some speak of a fourth stream that emerged during the 1980s: global ecology (32–34). Although, to some extent, environmental movements have always had—by definition—a global component, only relatively recently has this global component become explicitly framed within the movement. The globalization of environmental problems—just think of climate change—as well as the creation of new supranational arenas for the discussion of these problems—such as the Rio (1992) and the Rio+20 (2012) Earth Summits—encouraged the formation of transnational environmental protection organizations acting on a global scale. The rise and mobilization of the global justice movement in the late 1990s and early 2000s can be seen as having contributed to such a scale shift in environmental concerns, networks, and actions.<sup>7</sup>

#### 3. SOCIAL BASES AND POLITICAL VALUES

The question of who participates in environmental movements to some extent relates to the question of why people participate in movements at all, since "activists of any given of these [new social] movements also tend to be active in any given other one among them" (35, p. xix). There is a large social movement literature dealing with this question and emphasizing the role social

<sup>&</sup>lt;sup>6</sup>Here, we use the term environmental movements to refer to the broader meaning, which includes both ecology movements in the narrower sense (with its different components) and antinuclear energy movements.

<sup>&</sup>lt;sup>7</sup>Specific environmental issues—e.g., biodiversity loss or climate change—may have more or less global agendas, whereas others—e.g., clean water or local food sourcing—may have their roots in more local concerns.

processes play. For Klandermans (36), for example, there are three main reasons why people participate in social movements: (a) instrumentality, the desire to change one's or one's group circumstances by influencing the social and political environments; (b) identity, the desire to be part of something bigger than oneself and to manifest this; and (c) ideology, the desire to find meaning and to express one's understanding of the world. Participation in movements is also influenced by an individual's assessments of relative costs and benefits (37, 38). There is evidence in the literature that collective interests predict movement participation in general (38) and environmental activism in particular (39, 40).

The action repertoire of environmental movements is extremely diverse. It includes public demonstrations such as the Climate March; highly visible direct actions—such as Greenpeace's against whaling ships—aimed at broadcast across media outlets; checkbook activism (41, 42); and other more conventional and "invisible" processes of lobbying and engaging with businesses or government (5). The political action strategies of environmental movements thus span the more conventional to the unconventional, the legal to the illegal. The types of tactics adopted by actors within the movement will often vary on the basis of the specific issue or movement branch as well as the nature of the movement objectives.

The literature on the social bases of environmental activism and membership in environmental movement organizations has traditionally concluded that the movement tends to be disproportionately populated by a new middle class consisting of highly educated individuals employed in teaching, creative, or caring occupations (43-46). This new middle class was understood to be more likely to engage in new social movements pertaining to wider moral and cultural issues affecting all of society as opposed to the traditional interest-based old labor movement of Marxist imprint, focused on conflicts around control over the means of production and socioeconomic exploitation (13, 47). Offe (48) stressed the new middle class' higher education and dependency on state spending and the public sector (academia, arts, human services). Kriesi et al. (35) emphasized their higher skill set and expertise, and their struggle as one for autonomy from bureaucratic control. Regarding the link between membership of the new middle class and environmental activism, some studies showed a weak link with voting for green parties (49, 50). More recent empirical literature challenges this argument in showing that environmental activists' backgrounds are much more diverse (51), that social movements have a much larger and diverse following than just the new middle class (15, 52), and that being part of the new middle class may in some cases, rather, have a negative effect on environmental activism (53).

For the United States, in addition to higher education, residence in urban as opposed to rural areas, not having dependent children, being born after the 1940s, and being white all had positive effects on "environmental citizenship" net of controls (54). The findings for gender in particular show that although women are in general less politically active than men (55), they can still be more active than men when there are specific issues that matter to them; whether this is simply because they care more about the environment or whether they feel more vulnerable to environmental risks (56) needs further investigation (54). However, other studies instead found gender to play no role (39, 57–59). A negative effect for age on environmental activism has been shown (58, 60). Generations born in the post–World War II period are the most likely to join and do unpaid volunteer work for environmental and other social movement organizations (SMOs) (61). However, this may operate indirectly through values (57). Other studies, however, found no effect (39, 57, 59). Findings for education are mixed (39, 57, 58).

An important issue to consider when dealing with participation in environmental movements relates to the urban-rural cleavage. Rural residents are more likely to have a utilitarian view of nature (62) coupled with a growth mentality that spurs rural and small-town residents to value growth over environmental protection (62). Urban centers are more exposed to environmental

degradation and thus more likely to hold grievances spurring environmental activism (62, 63). Urbanization is also positively related to mobilization as it offers the possibility for similarly minded individuals to come together and mobilize (63–65).

Although the environmentalist movement is not a homogeneous movement, research has shown that its members do tend to share beliefs (66). Certain types of values have also traditionally been understood to be more conducive to environmental movement participation than others. Inglehart (67, 68) predicted that the expansion of education and rising material affluence in postwar advanced industrial democracies would result in an intergenerational shift from materialist values relating to economic security and survival to postmaterialist values prioritizing higher-order nonmaterial and self-actualization needs. However, the survey items most clearly linked to environmentalist sentiments (although originally intended as proxies for postmaterial aesthetic actualization), "trying to make our cities and countryside more beautiful" or, in the American survey, "protect nature from being spoiled and polluted," did not fit either category (67). The influence of postmaterial values on support for and membership in environmental groups is documented at the individual level (68–71). Postmaterialists have been shown more likely to be members of environmental groups (70, 72) and have constituted the bulk of green party membership (73). However, Stern et al. (74) found no significant influence of postmaterialism on individual participation in environmental demonstrations.

Other scholars have since challenged that environmental values clearly have both materialist and postmaterialist connotations and that materialist and postmaterialist values are not so clearly distinguished from the left-right cleavage (75, 76). Studies have also shown that preservation of nature (so-called green concerns) and protection from environmental hazards and pollution (so-called brown concerns) have diverse social bases (77). The preponderance of brown concerns might explain why environmental concern does not necessarily translate into participation in the environmental movements in Southern and Eastern Europe compared to Northern Europe (78).

The link with left-wing values is disputed. It is not clear whether leftists are more likely than others to be environmental activists. Back in the mid-1970s, Dunlap (79) suggested Republicans would be less environmentally minded than Democrats-liberals given that (a) business and industry oppose environmental reforms due to costs, (b) environmental reforms extend the role of government, and (c) environmental reforms require social change. Similarly, Dunlap et al.'s (80) analysis of the United States showed both party identification and different aspects of ideological liberalism (social and political but not economic) as significant predictors of movement activism. However, Gillham's (63) analysis of the European Union (EU) found only a minor effect of political placement on environmental participation; leftists and right-wingers did not differ much in their involvement.

Clearly, proenvironmental values should stimulate participation in environmental movements. The types of values that are seen to matter include a particular worldview concerning the humannature relationship, or the espousing of a new environmental/ecological paradigm that emphasizes the interconnectedness of human society and natural ecosystems and is skeptical of techno-fixes to environmental problems (81, 82). However, research that incorporated the new ecological paradigm (NEP) into a general model linking environmental values and beliefs to norms and behavior showed that such models are unsuccessful in accounting for environmental activism (74). Thus, it seems that the path from belief to concern to activism is not a clear-cut one. The NEP scale is said to consist of three distinct dimensions [see Dunlap et al. (83) for a discussion]: limits to growth, human domination over nature, and balance of nature. Using a scale for economic liberalism with response items such as "people worry too much about human progress harming the environment" and "in order to protect the environment, country needs economic growth" and an item for animal rights, Botetzagias & van Schuur (53) (2012) show that, although the former has

an impact on environmental activism of Green party members, the latter has an insignificant effect once one controls for previous participation in the environmental movement. Jasper & Poulsen (84) showed how family, friends, and previous activism were rated less by animal rights protestors for their animal rights participation; visual or verbal "moral shocks" were more relevant for this type of participation.

# 4. MOBILIZING STRUCTURES: ORGANIZATIONS, RESOURCES, AND NETWORKS

Broadly speaking, students of social movements have identified three types of endogenous factors that can facilitate the mobilization of social movements: resources, understood in a multiplicity of ways; a shared collective identity; and social networks and organizational ties. In this respect, environmental movements are no exception. We discuss each of them in turn.

Resource mobilization theory, as the name suggests, puts resources at the center of what leads to movement mobilization (see Reference 85 for a review), including those of environmental movements. Edwards & McCarthy (85) distinguish among five types of resources social movements may possess: moral (such as legitimacy, support, and celebrity), cultural (such as artifacts and cultural products), social-organizational (such as tactical repertoires, organizational templates, and technical or strategic know-how), human (labor, experience, skills, expertise, and also leadership), and material (such as money, property, and supplies) resources. In turn, coordination and strategy are required to convert individually held resources into collective resources to be utilized in collective action (85).

Environmental movements are particularly well-endowed in terms of all the resources mentioned above, as compared to other movements. Concerning more specifically human and material resources, they have more members and more resources than any other new social movements (86). In addition, the movements have witnessed an important organizational growth in terms of members and financial resources, especially in the 1980s (6, 86, 87).

However, this general statement should be qualified in two ways. On the one hand, there are significant country-specific differences. For example, in the peak of mobilization in the 1980s, the French movements appeared to be relatively poor in resources but less dense and differentiated than their counterparts in other European countries such as Germany, Netherlands, and Switzerland (86), and also as compared to the American movement (7). These types of differences can be explained by country-specific political opportunity structures, which we cover in more detail below.

On the other hand, there are differences within the movements as well. In organizational terms, political ecology groups in general and the antinuclear movement in particular are substantially weaker than other movement branches, such as conservation and environmentalist organizations (7). These differences can be traced back in part to a different relationship with the institutional context. Although, in general, state funding is higher for environmentalists than, for example, for peace activists (85), certain organizations within the movement are more likely to receive subsidies from the state. Furthermore, variations in the levels of resources of antinuclear energy movements and environmental movements more generally also depend on the conflict's intensity as well as on the activists' conscious strategies (7). Some activists, for example, may not be inclined to seek financial support from the state or other sources. Contributions from members, adherents, and sympathizers represent a large share of the financial resources of certain branches of the environmental movements.

Resources can be redistributed from state agencies to social movements. In the United States, for example, states redistribute three types of resources to social movements: monetary

resources and technical assistance provided organizations meet specific government criteria; legitimacy and fundraising facilitation through nonprofit status provided groups accept certain constraints on its activity (88); and access to state decision-making processes. For example, assessments of social and environmental impact required by the National Environmental Policy Act of 1969 have been exploited by environmental movements to block various planned projects. The antinuclear movements used these avenues to aid in halting nuclear power plants in the 1970s (89) and toxic waste facilities in the 1980s and 1990s (90, 91). President Clinton extended this tool into the environmental justice arena by mandating environmental equity impact assessments and creating the National Environmental Justice Advisory Commission with Council (NEJAC). Activists use NEJAC meetings to hold their own alternative events, similarly to the Earth Summit at Rio 1992 (85). Thus, environmental movements may take advantage of state sponsoring.

State funding often goes hand in hand with a professionalization process—as seen, for example, in the increase of paid staff—and, more broadly, an institutionalization process. Research has shown that environmental movement organizations have gone along this path in most countries. In this vein, Kriesi (86) shows that environmental movement organizations (but not antinuclear energy movement organizations) have become very professionalized and, as a result or concomitantly, have institutionalized (92–94). They have privileged access to political decision-making and are increasingly integrated into policy networks, as compared to other movements (7). By and large, environmental movements have deeper professionalization than other new social movements (7). The strong organizational development of environmental movements facilitates integration into political cooperation structures (95).

In addition, certain environmental movement organizations have also followed a path toward commercialization (86), resulting from the search for financial resources by engaging in merchandizing activities. Thus, some organizations have developed commercial activities such as the sale of publications, the setting up of specialized environmental stores, and advertising contracts with companies, only a few examples of these organizations' strong commercialization. This applies in particular to the less politicized and more traditional nature protection branches of the movement (7). Again, however, these processes of professionalization and commercialization, as well as more generally the institutionalization of the movement, are not homogeneous across movement organizations, some going farther than others along this path.

Organizational networks are a crucial part of the mobilizing structures that may facilitate collective action (96). Although this may vary from a country to another, overall environmental movements offer a heterogeneous picture from this point of view. Diani (6), for example, shows such heterogeneity for the Italian environmental movement. Using formal network analysis techniques, he draws a picture of a movement characterized by a small, stable core of central organizations, a variable number of intermediate actors that are active in specific subdomains, and numerous marginal groups that focus on their local claims. Other scholars have pointed to the importance of organizational networks in this context. Broadbent (97), for example, showed how organizational networks were a particularly crucial component of environmental mobilization in Japan. Others have conceptualized movement organizations as carriers of frames and ideologies that are linked to organizational processes. Brulle (98, 99) examined historical changes in the discourse of the US environmental movement showing how frames become part of distinct organizational forms. As Rao (100) points out, institutional entrepreneurs interpret grievances, develop alliances, and fight with antagonists, all within their multiorganizational field. The emergence of blue-green coalitions of labor and environmentalists in response to globalization shows how new conditions can lead to exciting new developments in organizational networks and mobilization potentials. More recently, Di Gregorio (101) shows how information and resource networks have a crucial role in

coalitions. Networking is also an effective strategy in the global environmental justice movement against toxic waste (102).

At the individual level of analysis, being involved in a network is likely to provide individuals with greater chances of participation in environmental movements (96). This could be either networks in general (e.g., more effective flow of information about environmental demonstrations or direct actions) or, more obviously, environmental networks in particular. For similar reasons, being members of organizations—whether specifically environmental movement organizations or more generally SMOs—contributes to participation in environmental movements (103).

There is a wealth of research showing that being part of organizations or being embedded in social networks furthers socialization, recruitment, and participation within social movements, including environmental movements (see References 59 and 60 for environmental activism in particular). Mertig & Dunlap (51), for example, showed that support for environmentalism is linked to support for other new social movement goals. Thus, participation in other movements and protest activism in general are also likely to be linked to participation in environmental movements (53). Moreover, environmental movement organizations are also critical for resource mobilization processes, given it is only through the creation of organizations and networks that the mobilization of money and labor can occur (85). Being asked to contribute money or time and effort is the most important predictor of whether individuals will actually do so (104, 105).

# 5. THE ROLE OF CONTEXT: POLITICAL OPPORTUNITIES FOR ENVIRONMENTAL ACTION

The impact of the political-institutional context has been at center stage for students of social movements since the early 1970s, but was especially so in the 1980s and 1990s. The concept of political opportunity structures is key to this approach (see Reference 106 for an overview). This concept refers broadly to "consistent—but not necessarily formal, permanent, or national—signals to social or political actors which either encourage or discourage them to use their internal resources to form social movements" (107, p. 54; emphasis in original). Scholars have included a wide variety of aspects under this concept, but they can be narrowed down to four major dimensions (108): (a) the relative openness or closure of the institutionalized political system, (b) the stability or instability of that broad set of elite alignments that typically undergird a polity, (c) the presence or absence of elite allies, and (d) the state's capacity and propensity for repression.

Political opportunities also matter for environmental movements: "The institutional structures of states clearly influenced the organizational structures, forms of action, and courses of development of environmental movements" (5, p. 622). In this vein, scholars have shown how the mix of political opportunities that characterize a given country—or any other subnational, political-administrative unit—strongly influences the levels of mobilization and the action repertoires of environmental movements.

The role of the political-institutional context is obviously best seen when one compares the mobilization of environmental movements in different countries (20, 89, 109–116). For example, Kitschelt (112) has shown how the strategies adopted by the antinuclear energy movement in four countries were determined by the political opportunity structures characterizing each country. More specifically, he hypothesized that antinuclear energy movements predominantly make use of assimilative strategies in states characterized by open institutional structures, and they privilege confrontational strategies in countries featuring closed institutional structures. This expectation reflects a broader view among political opportunity theorists that open political opportunities moderate the action repertoires of social movements, whereas closed ones favor more radical

forms of action (35). Diani & van der Heijden (117) also explain patterns of development of antinuclear energy movements across countries in terms of openness or closeness of the state.

Concerning environmental movements more generally, a similar comparative effort was made by van der Heijden et al. (116), who examined the general characteristics and country-specific trajectories of environmental movements in four Western European countries. The authors show that the movements display important cross-national differences not only in the levels of mobilization and action repertoires, but also in their organizational structures. In addition, they show country-specific developments over time as resulting in part from changing political alignments, which are an important dimension of political opportunity structures. France is an interesting case in point. The activity level of environmental movements experienced a sharp decline at the beginning of the 1980s. According to the authors, this was largely the result of the Socialists, who were the main potential institutional allies of the new social movements—of which environmental movements are a part—taking power in 1981. This deprived the movement of a powerful ally to support its mobilization and also reduced the need to mobilize, at least in the eyes of the potential participants (35, 116).

Apart from providing clues for explaining cross-national variations as well as different patterns of mobilization of environmental movements, political opportunities may lead the movements toward one if its main features: institutionalization. This process, which can be evaluated positively or negatively depending on the specific perspective one embraces, has been documented by various studies (118–120). Open opportunity structures—for example in terms of privileged access to political decision-making arenas and increasing integration of environmental movement organizations into policy networks—often result in both a moderation of the action repertoires (which in some cases can go as far as a total abandonment of protest activities) and a progressive institutionalization of environmental movements. The antinuclear movement, however, has largely been spared from this process and remains much less institutionalized than other branches of the movement.

With regard to the mobilization of grass-roots organizations and their integration into policy networks, large environmental movement organizations risk progressively transforming into conventional interest groups (121) that focus on interest representation and hardly engage in protest activities as social movements do. Their transformation into Green parties, which we discuss below as a form of movement impact, is also a potential path toward institutionalization in this respect, for they integrate environmental movements into the parliamentary arena. Once again, however, the integration of antinuclear movements into the political system is much less pronounced, if it exists at all. Furthermore, other branches of the environmental movement, such as the animal rights movement, did not follow this process of institutionalization, or they did so to a much more limited extent as they were less willing to become integrated into the political system and the latter was unready to integrate them.

Although here we stress the role of political-institutional aspects, we certainly cannot attribute cross-national variations in the levels of mobilization and in the action repertoires of environmental movements, nor their mobilization development patterns over time, entirely to changes in political opportunities. Other contextual factors should be taken into account as well. Thus, among the various potential factors, some stress the impact of economic opportunities (122, 123), whereas others point to the role of national political cultures (124). Concerning the latter, for example, a localist—as opposed to a nationalist—tradition may explain in part why environmental movements are more locally or centrally organized and mobilized (5).

Although political opportunity theorists have traditionally focused on variations across nations as well as over time, an important vertical dimension exists as well, in addition to the horizontal one.

We allude to the process of scale shift (3), which has led to the formation of political opportunities beyond the national state. Arenas for access of environmental movements exist at both the European and the world level. The already mentioned Earth Summits, for example, have provided new opportunities for the mobilization of environmental movements on the global scale. Of particular interest in this respect are opportunities potentially offered by the multilevel governance of the EU. Several scholars have examined the Europeanization of environmental action and actors. Rootes (125, p. 377), for example, states that "[e]nvironmentalists were quicker than many other organized collective interest groups to address the European level" because of the very nature of environmental issues and because environmentalists are transnationally oriented. There are also works examining Europeanization impacts on Southern and Eastern European environmental SMOs (126, 127).

The question is whether such supranational opportunities and arenas favor environmental activists in their quest for spaces for mobilizing on these issues and the movement more generally. Rucht (128) has stressed an apparent paradox about the strategies for influencing environmental policies: Although environmental policy-making plays an important role at the EU level, he found both a modest representation of environmental groups and an absence of environmental protest in Brussels. He advances several possible explanations for this absence of environmental protest at the EU level: The role of EU environmental policies is minor relative to the national policies; the use of domestic channels of influence is more promising than that of the EU channels; lobbying EU institutions is more adequate and effective than protesting at that level; certain characteristics of interest representation at the EU level, such as the variety of national interests and strategies, could make protest more difficult; resources are scarce and creating dense networks is challenging; motivating activists to protest at the EU level is difficult; there is no strong European identity or mass public; and environmental issues do not get the same attention as other more obtrusive and consequential effects on people's lives. In a similar vein, Rootes (125) has pointed to the limits of the Europeanization of environmentalism, inasmuch as opportunities that open up at the EU level are not accessible to all; reformist or pragmatic organizations and groups who act through consultation, negotiation, or lobbying are more likely to seize such opportunities, whereas more radical groups who prefer other strategies will not take advantage of them. Furthermore, because the Europeanization of environmental movements requires their institutionalization, given the mode of functioning of the EU actors and arenas, it is never likely to be complete.

#### 6. CULTURAL DIMENSIONS: FRAMING AND IDENTITY

In addition to resources and political opportunities, scholars have stressed a third set of factors accounting for the rise, decline, and impact of social movements: framing processes (see Reference 129 for a review). There is a wide literature on how environmental issues are framed, part of it related to social movement theory, another part not. Here we review only a few studies, to give a sense of the main issues.

The framing perspective "focuses attention on the signifying work or meaning construction engaged in by social-movement activists and participants and other parties (e.g., antagonists, elites, media, countermovements) relevant to the interests of social movements and the challenges they mount" (129, p. 384). As such, collective action frames allow one to make sense of experience and guide individual or collective action. Scholars have distinguished in particular between activities aimed at identifying causes and responsibilities (diagnostic frames), consequences and solutions (prognostic frames) of a given problem, and at motivating people for action (motivational frames) (130). Somewhat overlapping with this, others have stressed how framing processes may help form a shared collective identity relating to a common cause (identity frames), defining a given issue or

event as a social and political injustice to be redressed (injustice frames), and instilling in people a sense of agency that collective action will matter (agency frames) (131).

Framing processes—and their resulting collective action frames—are key to understanding why and how environmental issues become a matter of political conflict to be addressed through collective action, and therefore help explain the rise and mobilization of environmental movements. Furthermore, it is through framing activities that certain issues arise and others fall, influencing the issue-attention cycle of public attitudes (132, 133) and contributing to transforming the movements themselves. For example, framing can be seen as contributing to "new" issues such as sustainable development (134) and climate change (135). Such new collective action frames, in turn, can lead to mobilization. The success of an environmental justice frame in the United States is an interesting case in point. Studies have shown that this frame has been particularly appealing and residents' ability to mobilize for social change was linked to its adoption (136, 137). At the same time, this is a case in point to the emergence of country-specific framing of environmental issues. Although more disconnected in other countries, local opposition, in particular to toxic waste dumps and hazardous materials, but also to other environmentally harmful substances, has formed a distinct strand of the US movement (5) known as the environmental justice movement. In this vein, scholars have sometimes looked at local opposition to these issues in terms of effort at promoting environmental justice (138-142). This literature often focuses on environmental racism and the unequal exposure of minorities who seek environmental justice.

Framing obviously plays an important role for the antinuclear energy movement as well. Depending on how the issue of nuclear power is framed in the public domain, we may witness the rise of a strong or of a weak movement; as such, objective conditions and grievances have little explanatory power (109). In this context, the role of the media in influencing public opinion is crucial. For example, Gamson & Modigliani (143) show how media discourse on nuclear power is a key contextual aspect helping to account for the formation of public opinion on this issue.

Concerning antinuclear energy movements, the first and most fundamental framing act occurred with the Atoms for Peace initiative of the Eisenhower administration and, more concretely, in the Atomic Energy Act of 1954, which launched civilian use of nuclear power, first in the United States and then in Europe. This statement led to the emergence of antinuclear energy movements across the world in the decades to follow. From that moment on, nuclear power ceased to be seen as a neutral technological means of producing energy and has become an object of contention and opposition; this was perpetuated by the framing activity of movement activists, who shifted the focus from the issue of nuclear weapons to that of civilian use of nuclear power. However, the specific interpretive packages underlying the movement's mobilization are varied. Diani & van der Heijden (117) have distinguished seven ways in which opposition to nuclear energy can be framed or defined: a localist definition, an antitechnological definition, an anti-industrial definition, an antiauthoritarian definition, an anticapitalist definition, a pacifist definition, and a rationalizing definition. These prevailing definitions, which are sometimes combined, have evolved over time (116), just as the dominant symbolic representation of technology in relation to the nuclear energy issue has (144).

Framing processes are also central to the development and resilience of collective identities (129), which have been shown to be key to the development of a social movement (145). The mobilization potential of environmental movements (104) is made up of those individuals sharing concern about the environment. Of all these potential participants, only some effectively join the movement, and by and large this occurs through recruitment networks (48). This will be more likely where identity—or identification with the group—is strong (36), as this makes one more likely to want to act as part and on behalf of that group in collective action.

Thus, framing activity by environmental movement organizations and activists can help create a sense of shared identity, in the sense of collectively holding environmental concerns, which is often understood as a key factor behind the mobilization of environmental movements. In this vein, research on the Spanish environmental movement has stressed three identity construction processes that have sustained activism in the movement (146): identity extension, identity transformation, and biographical identity integration. More generally, for Diani (6) an environmental movement may be defined as a loose, noninstitutionalized network of informal interactions that may include, in addition to individuals and groups who have no organizational affiliation, organizations of varying degrees of formality that are engaged in collective action and motivated by shared identity or concern about environmental issues. In other words, we consider collective action motivated by a shared identity or concern about environmental issues as the key feature bringing together the environmental movements. Because these features of the movement can vary considerably in both space and time, empirical studies of environmental movements often examine evidence of shared identity, collective action, and network links (5).

#### 7. SCALES

Saying that we live in a globalized world is to state the obvious, although the extent and depth of globalization as well as its effects on national processes and outcomes are much debated (147). Environmental movements have not been spared the scale shift brought about by globalization. As mentioned above, global ecology can be seen as a fourth stream of environmental movements (32–34), along with conservationism, political ecology, and environmentalism. Scholars in this tradition often stress the rise of a—or even "the"—global environmental movement acting on the world scale (34).

Environmental issues, especially today, indeed have a strong global dimension and therefore should require global answers or at least transnationally coordinated ones. Accordingly, also taking advantage of the emergence of political opportunities at the EU level, environmental activists have formed transnational organizations, such as Greenpeace and the WWF, and networks through which they coordinate action on the global level. The literature discusses this aspect, for example, in relation to the challenges posed by sustainable development, ecological modernization, and climate change (148).

However, at the same time, environmentalists have often stressed that, although environmental problems should be thought of on a global scale, the best responses are to be found locally. This has been captured by the well-known formula "think globally, act locally" (149). This slogan indicates that although environmental problems are inherently global and hence require viewing them globally, responses to those problems are best implemented at the local level. Perhaps also as a result of this stress on local action, and in spite of parts of the movement coordinating action through the creation of horizontal networks (connecting local organizations and groups) and sometimes vertical networks (connecting the local level to the European level), much environmental activism remained anchored at the local level (122). Thus, local mobilizations and campaigns are an important feature of environmental movements (150).

Looking at the interplay of local, national, and global scales rather than aprioristically posing the existence of a global scene, some scholars have held skeptical views about the development of a truly global environmental movement, suggesting that the dilemmas that confront environmental organizations are no less apparent at the global than at national levels (151). In addition, differences in the political-institutional context, as discussed earlier, as well as in national political cultures and specific local characteristics pose several obstacles to the formation of a truly global actor. Rootes (5, pp. 631–32) has stated this view quite boldly: "[T]here is in fact such variation among

and within local and national environmental movements that to speak of a global environmental movement is a triumph of abstraction or of aspiration over experience."

Localism, however, can have its pitfalls. The local character of environmental activism is perhaps best reflected in the NIMBY (Not In My Back Yard) approach that characterized much local environmental activity during the 1970s and 1980s. From an organizational point of view, NIMBYs refer to local, community-based action groups that have addressed a wide range of issues, such as the siting of waste dumps—including toxic and nuclear waste—and incinerators (5). This phenomenon was particularly strong in the United States, where NIMBY groups have come to form a distinct strand of the movement under the banner of the environmental justice movement (5), although environmental justice scholars usually do not frame the issue in these terms. Opposition to road infrastructures or conventional means of energy extraction can often emanate from NIMBY approaches.

From an analytical perspective, it is not easy to say at first glance if a given protest stems from a NIMBY approach or is a genuine form of environmental activism. In addition to depending on the scope of the action—whether limited to the local level or extending beyond that—it is to some extent also a matter of values; broader, universalistic values usually lie behind environmental protests that go beyond a specific focus on avoiding something to occur in one's immediate surroundings. The NIMBY approach might be labeled as narrow and self-interested but has nevertheless contributed to the creation of a proenvironment climate also at the national level, particularly when it evolved in a NIABY (Not In Anyone's Back Yard) approach (152).

#### 8. IMPACT

Students of social movements have traditionally focused on explaining the rise of movements, their action repertoires, and the development over time of the protest and other activities they carry out. Less attention has been paid to the effects of the movements and their activities. However, the field is not completely void. Quite to the contrary, especially in the past two decades or so, scholars have been increasingly interested in the consequences of social movements, and today there exists a growing and valuable literature on the political, cultural, and biographical consequences of social movements (see Reference 153 for an annotated bibliography and Reference 154 for an overview).

Although most of the existing assessments are quite impressionistic and not grounded in a theory of movement impact, scholars have also been interested in the impact of environmental movements. Of course, when trying to gauge the impact of environmental movements, much depends on which measure of impact one is looking at. For example, we can look at procedural aspects such as policy-makers taking into account the views of environmental organizations, more substantial aspects such as new environmental legislation or the actual improvement of the environment, or more structural aspects such as the formation of Green parties. The further the measure from the movement's mobilization, the more difficult it is to establish a causal nexus between the former and the latter.

The scarce existing studies have documented cases in which environmental movements succeeded in halting specific programs and projects or have had some role in bringing about improvements in the state of the environment (155, 156). However, it is difficult to attribute the observed changes in the absence of a theory of movement impact. Among the most systematic attempts in

<sup>&</sup>lt;sup>8</sup>Although this does not exhaust the range of potential consequences, scholars usually distinguish among three types of effects of social movements: political (often with a focus on policy effects), cultural, and personal or biographical (see also Reference 152).

this respect, we can mention Rucht's (157) comparative analysis. Covering data on 18 Western countries, his study looks at the role of certain intervening variables that may mediate the impact of environmental movements on policy efforts and, ultimately, on changes in environmental quality, namely, public opinion, individual attitudes, and Green parties or their equivalents. He finds in general that "the higher the pressure exerted by environmental movements, the more state policies, in responding to intervening factors, tend to improve environmental quality, and vice versa" (157, p. 220). At the same time, however, he also finds several exceptions to this rule, which might be due to some unobserved variables such as, for example, environmental lobbying. His analysis conforms to the idea that policy changes are only indirectly linked to the movement's mobilization, although the chances for environmental movements to have an impact, for reasons relating to the very issues they raise, are greater than those of other movements such as the antinuclear energy and peace movements (158).

A good deal of work on the impact of social movements has been done on antinuclear energy movements. One of the reasons for this specific attention perhaps lies in the supposedly easy measures of impact: It is easier, for example, to observe changes in the number of nuclear power plants built or planned, or in the percentage of electricity produced by nuclear power, than, say, gauge the effects of peace protests. One should not forget, however, that observing a change in the dependent variable does not equate with finding an impact of the movement. Establishing the causal nexus between the two sides is a much more difficult task, and it is perhaps one of the factors dissuading scholars from addressing the consequences of social movements and protest activities.

At first glance, one might conclude that antinuclear protests were instrumental in the declining production of nuclear energy, in a temporary cease in the building of new plants, and even in the shutdown of the nuclear power industry. The movement has mobilized in most if not all the countries in which nuclear power was or is present, and often the decline of the nuclear power industry has been concomitant to such a mobilization. Evidence on this point, however, is mixed. In one of the most comprehensive comparative studies of the impact of antinuclear energy movements to date, Kolb (159) has examined the political impact of antinuclear protest in no less than 18 countries. Adopting the method of qualitative comparative analysis, his analysis suggests that "antinuclear energy movements have a significant impact on nuclear energy programs in many OECD countries" and that "a strong and sustained mobilization and the presence of political opportunities were decisive for the political success of antinuclear protest" (159).

Several scholars have argued, however, in particular for the US case, that the relationship between antinuclear energy protests and the decline of nuclear energy policy might well be spurious and that the movement has little to no direct impact (111, 160–163). Similarly, comparative analyses suggest that the strength of the antinuclear energy movement is not always conducive to policy impact (158, 164). More generally, an analysis of state-movement interactions shows that there is strong variation in government reactions to antinuclear energy movements (110) (see in particular References 164–166).

However, antinuclear protests might well be effective, but only indirectly, insofar as they can influence public opinion, which might give policy-makers stronger incentives to act in the direction of the movements' aims (158), or they contribute to the creation of a political climate hostile to nuclear power (111). Indeed, perhaps the effectiveness of environmental movements—as with all

<sup>&</sup>lt;sup>9</sup>Rüdig (115) provides an even wider and more comprehensive analysis of the effects of antinuclear energy movements, but he is interested in the movements more generally, including their mobilization.

<sup>&</sup>lt;sup>10</sup>A similarly skeptical argument about the policy impact of social movements in general has been made by Burstein (165), who maintains that scholars have largely overestimated both the extent of protests occurring and their capacity to influence policy-making.

movements—lies in raising public awareness of environmental issues rather than in influencing specific policy decisions. This can translate into longer-term effects as public opinion is a key factor behind policy changes (167).

Research on the impact of environmental movements has profited from comparative analyses, which allow for a broader international perspective of the movement's effects in a given country and, above all, provide a better methodological ground to gauge those effects. The studies by Flam (165, 166), Kolb (159), and Midttun & Rucht (164) deserve special mention, as they all include a wide range of countries. Before them, Kitschelt's (112) study of antinuclear energy movement in four west European countries is among the most well-known. Starting from a distinction between procedural, substantial, and structural impacts, he has shown that political opportunity structures are decisive for the movement to reach different kinds of policy impact. A similar argument is made by Kriesi et al. (35), although they also consider other movements as well.

Well-thought comparative designs are helpful not only descriptively, but above all to suggest potential causes of movement impact. Specifically, they aid us in highlighting how certain features of the political context can help environmental movements influence policy-making or prevent them from doing so. Thus, for example, in addition to Kitschelt (112), who has shown how the impact of antinuclear energy movements depends heavily on the strength of the state, Giugni (158) has stressed the role of the presence of political allies within the institutional arenas and of a favorable public opinion. Kolb (159) has pointed to a combination of factors, showing how movement strength, political-institutional structure, elite conflict, stability of political alignments, public opinion, political crisis, population size, and energy import dependence impacted the development of nuclear energy in OECD countries. Midttun & Rucht (164) also stress the importance of economic variables, in addition to social and political ones.

Of course, the consequences of environmental movements are not limited to policy effects. Other types of potential effects exist as well. We mention above raising public awareness and influencing public attitudes on the environment. Another important impact consists in the formation of Green parties (168–173). This impact is all the more important that Green parties are able to gain a substantial share of the votes and, as has sometimes happened, enter a governmental coalition

The importance of this kind of structural impact (112) is that it contributes to changing the rules of the game. In other words, once Green parties enter the institutional arenas—be it the parliament or the government—the political opportunity structure for the mobilization of environmental movements is no longer the same. From the point of view of meeting policy goals, they might improve, as it is important to have institutional allies do to so (158). The formation and especially electoral breakthrough of Green parties, however, might be detrimental to the movement's capacity to mobilize in the streets, as to some extent there is no longer the need to do so.

At the same time, the rise of Green parties marks one of the key features that have characterized the development of environmental movements in Europe, if not the most important one overall: its institutionalization. As Rootes (5, p. 623) has noted, "[o]ne of the more distinctive aspects of the institutionalization of environmentalism has been the development of Green parties and the consolidation of their position in the politics of most Westerns democratic states." However, party formation is not the only way through which the movement has entered the institutional political arenas and thus institutionalized. Other channels exist as well, such as the establishment of procedures of consultation, cooperation, or even delegation of power that has taken place in certain countries (7). However, Green parties by and large are the most tangible means through which environmental movements have institutionalized, with all its advantages, but also with all its pitfalls.

#### 9. CONCLUSION

Concern with the environment can be traced back at least to the intellectual and artistic Romantic movement of the second half of the eighteenth century. Resulting from the rationalization of nature brought about by the Enlightenment and from the growing industrialization of society, it contained the seeds of the emergence that, decades later, would become the environmental movements. Some saw the exploitation of nature by the mass production factory system something that had to be challenged and resisted. At that stage, however, environmentalism was a purely individual preference. The first collective effort to do something to preserve the natural resources and landscape only occurred in the second half of the nineteenth century, with the creation of the first nature conservation organizations. However, it was only in the 1960s that environmental movements begun to be regarded as the social movement literature defines them: movements characterized by a strong political dimension. It is also at that time that antinuclear movements appeared on the political scene.

This article has reviewed literature on environmental movements from the perspective of social movement theory. We have adopted a comprehensive definition that includes antinuclear energy movements as part of environmental movements. However, given their specific thematic focus, the importance of their mobilization historically, and their organizational networks, the former can be—and often is—treated as a distinct movement. Similarly, other parts of the environmental movements are sometimes considered on their own. This is, for example, the case for the so-called environmental justice movement.

After a brief historical excursus on the development of environmentalism over time, our review has stressed four main aspects of environmental movements that are discussed in the extant literature: social bases and values, mobilizing structures (organizations, resources, and networks), the role of context and in particular of political opportunities, and framing processes and identity. These four aspects were complemented by a closer look at two specific issues important for these movements: the role and place of local activism, as opposed to global ecology, and the impact of environmental movements.

Our review has underlined three main features of environmental movements: heterogeneity, transformation, and institutionalization. To begin with, environmental movements are extremely heterogeneous. Of course, antinuclear energy movements are much less heterogeneous by definition, as they address a specific issue, so that they may be called single-issue movements. But environmental movements, in the broader meaning we have adopted here, present a wide variety of actors and organizations (from local and loosely structured to national and supranational professionalized organizations), issues and goals (covering all dimensions of environmental protection and related issues such as justice), strategies (from the most moderate to radical forms of action), and finally in terms of effects as well. Such heterogeneity can be seen as both a strength and a weakness. It is a strength insofar as the movement has multiple options for mobilizing. However, heterogeneous movements can hardly coalesce into a strong shared collective identity.

Environmental movements have also profoundly transformed themselves. As we have described, this has occurred in the *longue durée* through the shift from conservationism to more politically oriented movement streams, but also in the short term through the emergence of new actors and issues as well as new ways of framing environmental problems. Although this is not entirely a voluntary process, this capability to transform itself probably has contributed to the movements' survival despite the ebbs and flows of their mobilization, along with the strong organizational structures that characterize them as compared to other movements.

However, the most important transformation probably consists in the process of institutionalization. As many scholars have stressed, environmental movements have strongly institutionalized.

This can be seen in particular at two main levels. On the one hand, environmental issues have institutionalized as they have become—in part also as a result of the movement's mobilization—a constitutive part of contemporary societies. Both the general public and policy-makers are today much more concerned with the environment and sensitive to environmental problems than they were a few decades earlier. Incidentally, this can be seen as a major impact of environmental movements. On the other hand, environmental actors have institutionalized as well. This is most evident in the formation of Green parties but can also be seen in the increasing incorporation of environmental organizations in policy networks. At the same time, however, we have stressed that this process of institutionalization has not touched upon the movements in their entirety. Thus, antinuclear energy movements are much less institutionalized than other movement branches. In addition, this process has occurred to a greater extent in some countries than in others, given, in part, different political opportunity structures.

Given the breadth and extension of scholarly work on environmental movements, it is hard to imagine new avenues for future research other than those that may be suggested for social movements in general. Some suggestions can nevertheless be made: Future research should strengthen the comparative agenda both to explain the movement's mobilization and its impacts, as well as provide a more comprehensive analytical framework connecting macro, meso-, and microlevels of analysis, and move toward a transdisciplinary approach to the study of the environmental movement.

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